

## Appendix B: Terminal Buildings

Terminal buildings provide a connection between airside and landside operations and, within the buildings, a variety of services is offered to users and visitors. The Virginia Department of Aviation participates in the planning, design, construction, and certain maintenance activities for terminal buildings. The state's participation is based on the amount of public-use space provided inside a terminal building.

### B.1 Public-Use Space

Common-use public areas that are directly related to the movement of passengers and baggage in air carrier terminal buildings are eligible for state funding. Non-revenue producing areas and joint-use space in terminal buildings are eligible for state funding.

Public-use space is defined as terminal building space that:

- is used for public benefit and convenience
- does not produce revenue for the sponsor or any other public or private entity

Incidental use of public space for advertising public events, posting public notices, or housing vending machines for public convenience is permissive in public-use spaces. The costs associated with adapting a building to provide for these incidental uses are not eligible for state funding.

Private-use space is defined as terminal building space that:

- is used to produce revenue
- is used for administrative activities

A sponsor may lease space for any public or private activity if the use does not interfere with aeronautical activities and complies with *Virginia Aviation Regulations* 24-VAC-10 seq., state grant assurances, and federal grant assurances as applicable. Sponsors should follow the *Virginia Public Procurement Act* when leasing terminal building space.

If a sponsor converts public-use space into private-use or revenue producing space during the commitment term specified in a grant agreement, the sponsor must reimburse the state for its share of the cost to build that space. That amount will be prorated based on the number of months remaining in the commitment term of the grant agreement. If private-use space is converted to public-use space, DOAV will not reimburse a sponsor for the change in space usage.

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Public-Use Space	Private-Use Space
<ul style="list-style-type: none"> <li>• lobbies</li> <li>• flight planning areas</li> <li>• pilot lounges</li> <li>• 400 square feet of conference room</li> <li>• public restrooms</li> <li>• baggage claim delivery areas</li> <li>• associated automated baggage handling equipment</li> <li>• public-use corridors to boarding areas</li> <li>• loading bridges</li> <li>• passenger vehicles moving between or within terminal facilities exclusively within airside areas</li> <li>• central waiting areas</li> <li>• holding areas for air freight loading and unloading</li> </ul>	<ul style="list-style-type: none"> <li>• cleaning and laundry areas</li> <li>• public lockers</li> <li>• pilot sleep rooms</li> <li>• restaurants</li> <li>• sponsor and management offices</li> <li>• fixed base operations</li> <li>• aircraft maintenance areas</li> <li>• rental car services</li> <li>• entertainment areas such as game rooms</li> <li>• communication equipment, such as telephones and fax machines, in business and related centers</li> </ul>

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#### 46 B.1.1 Joint-Use Space

47 Some areas and equipment serve both public-use and private spaces. These  
48 include:

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- 50 • circulation areas including vestibule areas
- 51 • storage areas for janitorial equipment used for accommodating public health  
52 and safety
- 53 • mechanical areas for heating, air conditioning, ventilation, and utility systems

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55 State participation in these joint-use spaces will be prorated based upon the ratio of  
56 eligible DOAV funded public-use space to total building space minus the joint-use  
57 space.

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#### 59 B.1.2 Conference Room Space

60 State funding may be used in the construction of a maximum of 400 square feet of  
61 conference room space within a terminal when the conference room space will be  
62 used for meetings with industrial and business prospects and meetings related to  
63 airport business. This space may also be made available on an expense-defraying  
64 basis for meetings and conferences for groups or companies. The utilization of  
65 conference rooms for economic development efforts and activities should have  
66 priority over other uses.

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#### 68 B.1.3 Federal Inspection Facilities

69 The construction or improvement of federal inspection facilities, including baggage  
70 handling equipment, is eligible for state funding. Administrative office space and  
71 special purpose equipment are not eligible. Sponsors may not charge for the use of  
72 this space or related equipment.

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Example: Determining a Public-Use Funding Ratio and Square Footage

A new terminal building will have the following square footage:

- 5,000 total square footage
- 2,500 public-use space square footage
- 1,500 private-use space square footage
- 1,000 joint-use space square footage

To determine the public-use funding ratio for this terminal:

Step 1: Figure the terminal space that is not joint-use space:

total square footage – joint-use space square footage

$$5,000 - 1,000 = 4,000$$

Step 2: Figure the ratio of public-use space square footage to total square footage to determine the DOAV eligible percentage:

public-use space square footage ÷ total square footage

$$2,500 \div 4,000 = 0.625 \text{ or } 62.5 \text{ percent}$$

Step 3: Figure the portion of the joint-use space square footage that is considered as public-use space:

public-use ratio x joint-use space square footage

$$0.625 \times 1,000 = 625$$

Step 4: Calculate the total square footage eligible for DOAV funding:

public-use space square footage + public-use share of joint-use space square footage

$$2,500 + 625 = 3,125$$

Step 5: Calculate the percentage of eligible for DOAV funding:

total square footage eligible for DOAV funding ÷ total square footage

$$3,125 \div 5,000 = 0.625 \text{ or } 62.5 \text{ percent}$$

#### B.1.4 Accessibility Features

Fixed terminal facilities and equipment, including boarding devices required by 49 CFR 27, that provide access for people with disabilities are eligible if:

- they are a part of the design of a new terminal or renovation
- they are required by federal or state law

### B.2 Terminal Building Conceptual Studies

Terminal building conceptual studies are required for all airports, except local service airports, before design can begin for a new structure, a replacement structure, or an expansion of an existing structure. These studies need to include:

- detailed project description
- justification for the proposed project
- conceptual analysis
- geometric design
- justification for requested deviations from standards
- construction cost analysis
- project schedule
- project cost
- project budget

For reliever, regional, and community service general aviation airports, the studies must provide an analysis of the public and non-public use space based on DOAV's 20-year funding eligibility model to determine maximum funding eligibility. A final determination made by such a study is the ratio of eligible DOAV funded space to total building space. DOAV will provide the model calculation to a sponsor upon request. Federal Aviation Administration guidelines for terminal buildings should be used for air carrier airports.

### B.3 Terminal Buildings for Local Service Airports

For local service airports, eligible terminal design and construction are limited to a maximum of 1,200 square feet of public-use, non-revenue producing space, with the state share limited to 90 percent of the total eligible project costs.

A maximum square footage for local service airports has been determined for specific uses:

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Space Usage	Maximum Square Footage
passenger and pilot lobby	400
flight planning area	100
restroom – men's	144
restrooms – women's	144
vending area	100
mechanical rooms	100
storage	100
circulation	148

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118 If any dedicated space usage listed above is excluded from a terminal, the  
 119 associated square footage is deducted from eligible state participation, and it may not  
 120 be applied to another space usage. The usage listed above is recommended but not  
 121 required.

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#### 124 B.4 Terminal Building Site Preparation

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126 All site preparation required to construct a terminal building and a nominal area five  
 127 feet outside the perimeter of the terminal building's foundation are eligible for funding  
 128 at the same prorated basis as the funding for the terminal building.

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#### 131 B.5 Terminal Building Design and Construction

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133 Terminal development for the purpose of accommodating passengers and cargo  
 134 activities is eligible for state funding. The development can be a new structure, a  
 135 replacement structure, or an expansion of an existing structure. The state's  
 136 participation rate towards the cost of the design and construction of public-use, non-  
 137 revenue producing areas is up to 100 percent, not to exceed 90 percent of the total  
 138 project cost which includes building design, site preparation, and utility systems.  
 139 DOAV has the authority to approve or reject any design, construction method, and  
 140 materials proposed for a terminal. **All costs for a terminal building that exceed**  
 141 **criteria approved by the department will be borne by the sponsor.**

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143 As terminal projects usually involve eligible and ineligible items, the state's  
 144 participation is prorated for eligible items. The share may be determined by the  
 145 following methods:

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- 147 • A detailed cost analysis assigns costs to eligible areas and prorates costs for  
 148 items such as site preparation, foundations, and utilities that contribute to  
 149 public-use areas.
- 150 • When prorating on a square footage basis, construction costs and costs for  
 151 eligible items are prorated on the ratio of eligible square footage to the total  
 152 usable square footage of the structure.

Approved terminal building concept studies are required for all airports, except those with a local service role, before design work can begin.

## **B.6 Terminal Building Operation and Maintenance**

By accepting state funding for a terminal building, a sponsor undertakes responsibility for the operation and maintenance of the terminal building. Sponsors are responsible for all operational costs and are expected to keep terminal buildings to open during regular business hours.

### **B.6.1 Terminal Building Maintenance**

The state's participation in the maintenance of a terminal building is based on the original public-use space ratio used for the construction of the building. If the amount of public-use space within a terminal building has changed, the public-use space ratio will be recalculated for the project application process. If the maintenance will affect only public-use space, the state's participation rate will be 80 percent. Terminal building maintenance will be funded through the Maintenance Program.

Eligible maintenance activities include exterior and interior painting and repairs to plumbing and electrical systems and roofs. Ineligible activities include, but are not limited to, janitorial services, wallpapering, window treatments, lamp replacement, and exterior power washing. When a project request is for the replacement of whole systems such as carpeting, heating, ceiling tiles, roof bladders, and air conditioning, DOAV will physically inspect the site and use that review to determine need and eligibility.

### **B.6.2 Terminal Building Renovation**

Renovations to a terminal building are architectural or cosmetic changes made within the existing footprint of the building. These changes may include new carpeting, lighting, wall treatments, furniture, sound proofing, interior structural change, and features to improve access under the Americans with Disabilities Act (ADA).

The state's participation in the renovation of a terminal building is based on the original public-use space ratio used for the construction of the building. If the amount of public-use space within a terminal building has changed or the renovation will alter the amount of public-use space, the public-use space ratio will be recalculated for the project application process. Terminal building renovations will be funded through the Airport Capital Program. DOAV will review and approve plans and specifications. It may also conduct inspections on the work.

### **B.6.3 Terminal Building Expansion**

An expansion of a terminal building will create a change in the existing footprint of the building. A terminal building concept study will be required for an expansion.

The state's participation in the expansion of a terminal building is based on the public-use space ratio as recalculated based on the expansion. Terminal building

expansions will be funded through the Airport Capital Program. DOAV will review and approve plans and specifications. It may also conduct inspections on the work.

## **B.7 General Aviation Terminal Building Security Systems**

Security systems for new and existing general aviation terminal building will be funded through the Voluntary Security Program at the participation rate of 80 percent. A sponsor shall coordinate the inclusion of security systems in the design of a new terminal building at the earliest phase possible. Security systems for existing terminal buildings must be included in airport security plans to be eligible for funding.

## **B.8 Terminal Building Furniture**

The purchase of original furnishings for the public-use portions of terminal buildings is eligible with the state's participation rate at 100 percent. This usually includes seating for waiting areas, conference rooms, and pilot lounges. The purchase of furnishings is not subject to the 90 percent limitation. Replacement furnishings for public-use areas are eligible with the state's participation rate at 50 percent of the eligible cost. The department reserves the right to disapprove the purchase of furniture based on the number of pieces of furniture, style, and material requested.

Ineligible items include:

- trash cans
- window treatments
- artwork
- plants
- business and communications equipment
  - telephones
  - fax machines
- entertainment amenities
  - stereos
  - CD players
  - radios
  - televisions
  - display cabinets
- outside furniture
  - benches
  - rocking chairs
  - lounge chairs
  - stackable non-permanent chairs

**B.9 Emergency Medical Equipment**

Automatic external defibrillator (AED) devices are eligible for funding based on local codes and reasonable and necessary requirements as determined by DOAV. The state's funding participation is 80 percent.

**B.10 Terminal Buildings for Multimodal Service**

Multimodal terminal buildings offer mobility for passengers and baggage between two or more modes of transportation that are operating on a scheduled basis under a franchise or similar authority granted by a federal, state, or local agency. These buildings are supported by connecting route networks that extend beyond the local service area. State funds may be used to develop a multimodal, public-use terminal located within the boundaries of an airport, and this usage is subject to the prerequisites and cost participation of regular terminal buildings. Only the portions of the building directly related to aviation use are eligible.